M10 Radio Controls

PWR/VOL-	Power and volume control
SQL-	Squelch noise control
SCAN -	Channel Scan
DISP. -	Display control
PRI.-	Priority scan
PRG.-	User program control

Each of these controls is described in the following section.

PWR/VOL Control

The radio is turned on and off by pushing this control (Push on, push off.) The audio level from the speaker increases as this control is rotated clockwise.

SQL Control

This controls the receiver silencing circuitry. To correctly utilize this control, first select an unused channel, then rotate it counterclockwise until noise is heard in the speaker and the “BUSY” indicator shows in the display. Now rotate the control clockwise until the noise is squelched and the “BUSY” indicator goes out on the display. This is the most sensitive setting for this control. Rotating this control further clockwise decreases the sensitivity of the receiver. This is sometimes handy in noisy conditions.

Channel selector knob

Use this control to select a channel.

Panel Buttons

The four front panel buttons perform two functions each. The first one is performed when the button is pressed and then released after the first “beep”. The second function is performed when the button is pressed and held in for 2~3 seconds and a second beep is heard.

1 -When the panel button is pressed and released after the first “beep”:

The “**SCAN**” button toggles the radio in and out of the scan mode. The “SCAN” indicator, on the display, will be “on” when in the scan mode.

The “**DISP**” button changes the display from channel number, an alphanumeric name (up to 7 characters), to frequency, to tone frequency, then back to channel number only.

The “**PRI**” button toggles the radio in and out of the priority mode. The “PRI” indicator, on the display, will be on when in the priority mode. The Priority channel may be selected in the “User Programming Mode.” If no priority channel has been selected a double beep will be heard and the indicator will not come on.

The “**PRG**” button puts the radio into the“User Programming Mode. The “U PROG” indicator, on the display, will be “on” when in the user programming mode.

2- <u>When the panel button is pressed and held until the second “beep”:</u>

The “**SCAN**” (A/D) button adds or deletes the present channel from the scan sequence.
The “**D**” indicator is turned on when the channel is deleted from the scan sequence.
(The channel will not be scanned if it is deleted from the scan sequence).

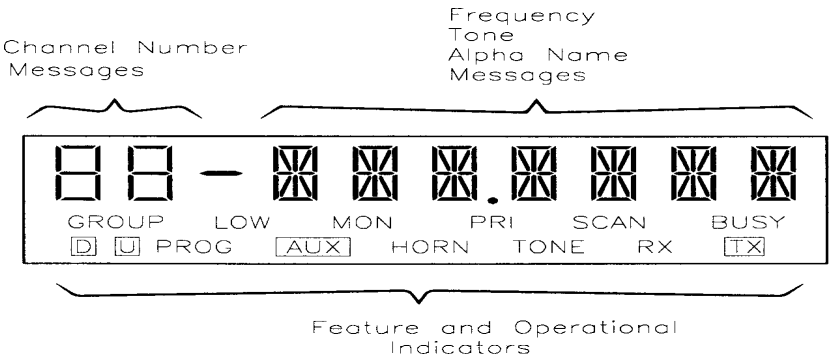
<u>When adding or deleting channels, it is recommended that you be out of the SCAN Mode, thus viewing all the channels in the Group.</u>

The “**DISP**” (DIM) button toggles the display backlighting between dim and normal.

The “**PRI**” (L/N) button toggles the receiver between “normal” and “low”sensitivity. (The “LOW” indicator is on when the receiver is least sensitive. This is useful in areas where very strong interfering signals are present.The receiver is reset to the “Normal” condition everytime the radio is turned off.)

The “**PRG**” button provides access to further programming by an authorized person. (Dealer)
MIC connector
This is used to connect the microphone to the radio.
Cloning Plug
Used to connect to another M10 radio,or to a PC, to clone information.
or program the radio.

INDICATORS



GROUP Active when a group of scanned channels have been selected. A number above will indicate which group is active. Only valid in radios with Group Scan Software.

LOW During RX operation this indicates the receiver is operating in reduced sensitivity mode to prevent strong signals from overloading the receiver. During TX operation this indicates low power has been programmed into the TX of this channel.

MON This will only appear when a tone has been programmed into the RX. MON will indicate that the muting function of the tone has been disabled. This may happen when the mic is taken “off hook” or by enabling the monitor function.

PRI “On” when the priority function has been activated.

SCAN “On” when the radio is in scan mode. The radio also requires the mic to be “on hook” and channels programmed into the scan sequence.

BUSY Indicates a received signal has exceeded the squelch threshold. Audio will be heard unless a tone is also muting the channel.

D Appears on all channels NOT in the scan sequence.

D PROG Radio is operating in Dealer Programming Mode.

U PROG Radio is operating in User Programming Mode.

AUX Not used.

HORN “On” when the external horn blowing function has been activated. (MTS versions.)

TONE Active when a CTCSS or DCS tone has been programmed into the channel. RX and TX tones are indicated independently.

RX Used only during Dealer programming.

TX Appears when the radio is transmitting.

SCAN MODE

When the “SCAN” indicator is “on” the radio will scan all the channels that have been entered into the scan sequence whenever the microphone is hung up. When the radio comes to a channel that is busy it will stop and stay on that channel for the duration of the “scan resume time” that has been programmed in the “User Programming” mode or until the channel becomes clear. If a tone is programmed into the RX, it must be valid as well, unless the Monitor function is on.

PRIORITY MODE

When the “PRI” indicator is “on” the radio will continually sample the status of the priority channel. If the priority channel becomes busy the radio will “beep” and stay on the priority channel until it becomes clear. ***“Pr” plus the priority channel number*** will be displayed on the display. If the mic is taken off hook, one of the following will happen, depending on how your dealer has set the priority option.

1) The radio will always revert to the “PRI” channel.
2) The radio will revert to the priority channel only if the radio is not on a busy channel. If the radio is on a busy channel, when the mic comes “off hook” the radio will stay on that busy channel until the mic is placed back on hook.

USER PROGRAMMING MODE

The “User Programming” contains four separate modes.

i) Bank number select.*(if available)*
ii) Priority channel select.
iii) Monitor on/off select.
iv) Scan delay select.

Please Note:

a) To enter “User Programming” press the “PRG” button.
b) Once in the “User Programming” mode, use the “PRI” button to select the desired mode.
c) In the “Priority channel select” and the “Bank number select” mode, use the “Channel knob” to select a channel or a bank number. In any of the other three modes use the “DISP” button to select the proper function.

Bank: 1, 2, 3, or 4.

The “BANK” mode in “User Programming” lets the user select up to four different “BANKS” of frequencies depending on how the dealer has set up the radio. This means that there can be up to, 4 times 99, or 396 channels installed in the radio. If there are no frequencies installed in a bank it will display “CH ALL CLR”.

Priority Channel

May be any valid channel.

Monitor on/off

Monitor ON = defeats tone muting while on hook unless Busy Channel Lockout has been enabled on the channel. "MON" indicator is visible on the display when the function is active.

Scan Delay :0, 3, 6, or C.

- **0** = No delay , the radio will resume scanning as soon as the channel clears.
- **3** = 3 seconds delay, the radio will resume scanning after 3 seconds.
- **6** = 6 seconds delay, the radio will resume scanning after 6 seconds.
- **C** = The radio will resume scanning 3 seconds after the channel has cleared.

NOTE: Each "BANK" is separate from the others so you cannot scan channels that are in another 'BANK". However, you can have separate Scanned channels, Priority channel and Scan resume times, etc. for each "BANK."

<u>Channel Revert</u>

Active when the radio is in the scan mode (the radio is scanning)

If the radio is scanning and not on a busy channel, when the USER takes the microphone "Off Hook", the radio will "REVERT" to the channel that was selected when the scan key was pressed to enter the scan mode. (This channel does not have to be one of the scanned channels.)

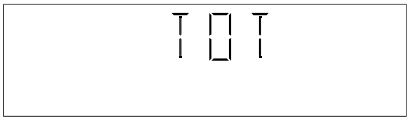
However, if the radio hears a signal and stops on a channel and the USER takes the microphone "Off Hook" before the radio resumes scanning, the radio will stay on that channel.

<u>M10 DISPLAY MESSAGES</u>

Indicates there are no frequencies programmed into this Bank.

The radio's PLL is "out of lock", on the present channel. If RX is active, no TX is permitted. If TX is active the radio will beep and return to RX when the PTT is released. Radio requires service.

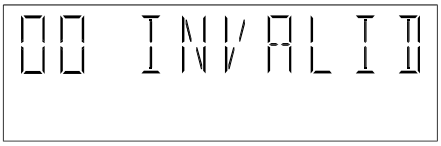
Indicates TX Time Out Timer has expired. A beep is heard intially, then momentarily until PTT is released.



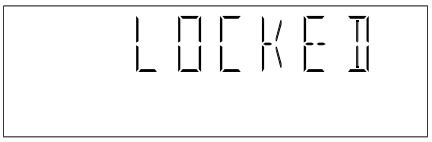
POWER (START) UP WARNINGS

00 INVALID- Wrong Lock Code entered

01 INVALID- Wrong option switch selected or front panel switch is active on “turn on”. (or Mic).
02 INVALID- Front panel switch is active on “turn on”.(or Mic)
03 INVALID- Incompatible software.
04 INVALID- Invalid PC request.
05 INVALID- Radio “turned off”, and “turned on” too quickly.

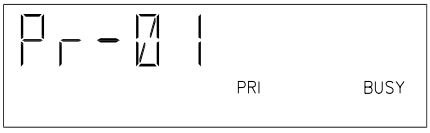


Radio’s theft protection has been triggered and the code has been entered incorrectly more than 10 times.



Scan was selected and the mic placed “on hook”, however, no channels have been selected to be in scan within the Bank or group.

Priority function has been selected and the priority channel has become active.



No Alpha name has been programmed into the channel.
(Display selected with DISP key)

No Tone has been programmed into the channel.
(Display selected with DISP key).